State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3406 FAX (603) 271-7894

Mr. Richard Kalin
P.O. Box 516
Hollis, NH 03049

June 27, 2002
Letter of Deficiency
DAM #119.09

RE: Haydens Mill Pond Dam, Hollis

Dear Mr. Kalin:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on December 12, 2001. During this visual inspection and/or file review, the following old and new deficiencies were observed:

There are trees located on the crest of the right embankment;

2. There is cracked concrete on the upstream face of the dam to the right of the spillway;

3 The overall condition of the concrete spillway is poor. There is spalled concrete on the right spillway channel wall, the downstream face of the spillway has severe concrete erosion on the right side at the contact with the right wall, and the spillway center buttress wall has severe erosion on the left side approximately 1 foot above the apron;

4. There are missing stones and soil erosion at the downstream end of the right spillway training wall at the contact of the concrete and stone wall;

5. There are several tree branches overhanging the spillway discharge area, they are close to reaching the concrete channel floor;

6 The downstream stone wall of the dam is severely leaning;

7. The historical seepage under the stone at the toe of the dam is approximately flowing at 10gpm;

8. There is seepage through the stones located to the left of the low level outlet;

9. There are missing stones and soil erosion downstream from the low level outlet on the right side stone training wall;

10. There is a wet area/possible boil located approximately 50 feet from the downstream toe. The flow was clear and estimated at 2gpm;

1 The operations and maintenance plan needs to be updated; and

12. The Emergency Action Plan (EAP) has not been updated or tested.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

September 1, 2002:

1. Prepare and submit an updated written operation and maintenance plan. The plan should describe the control of impoundment levels, monitoring/maintenance procedures, and identify emergency contact personnel. In addition, the plan should include information on the method and frequency of the monitoring of the leaning downstream stone face. Measurements taken to date should be submitted to the DES for review;

2. Repair the cracked gunite resurfacing on the upstream right concrete retaining wall, to the right of the spillway, and the deterioration and cracking of the concrete on the abutment walls and bottom slab of the spillway;

3. Remove the trees from the right embankment crest;

4. Repair the concrete spillway. Specifically the spalled concrete on the right hand side training wall, the downstream face of the spillway at the contact with the right training wall, and the spillway center buttress on the left side approximately 1 foot above the apron;

5. Replace the missing stones and repair the erosion on the downstream end of the right spillway training wall at the contact of the concrete and stone wall;

6. Trim the branches hanging over the spillway discharge channel so they do not hang below the top of the training walls;

7. Continue to monitor the leaning downstream wall and the historical seepage. The monitoring results should be submitted to the DES Dam Bureau on an annual basis;

8 Replace the missing stones and repair the soil erosion downstream of the low level outlet pipe on the right hand side training wall; and

9 Update and test the EAP.

This dam is classified as a significant hazard dam. Due to this classification and the condition of the current condition of the dam DES is requesting that your schedule is one in which allows for completion within a year.

Due to the time that has lapsed as well as additional deficiencies observed as a result of the December 12, 2001 inspection, DES will be officially closing out the 1997 LOD. Enclosed is a copy for your reference. It is our hope that the additional deficiencies as well as the outstanding deficiencies will be addressed within the schedule indicated above.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

COPY

Jeffrey M. Blaney
Dam Safety Engineer

Attachments Guideline for an O&M plan, Copy of Dec 97 LOD, DB8, DB13
cc: Gretchen Rule
Town of Hollis
Certified #7000 1670 0000 0586 0448
JMB/was/h:/safety/wendy/lod/119-09lod.doc